

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) ~~Method~~ A method to synchronize at least a user equipment to at least one base transceiver station belonging to a digital telecommunication network, in which radio signals transmitted and received by said base station are subdivided into frames (Fn) having predefined duration and each frame is subdivided into a predefined number of timeslots (Tn) and codes (Cn), said signals including at least a synchronization signal (S), which is transmitted by the base transceiver station and contains a modulation elementary units sequence suitable to identify the timeslot (T1) and the code (C1) of a service channel containing a system messages (M), ~~characterized in that it includes the following operational steps~~ the method comprising:

[[•]] marking the synchronization signal (S), in at least one frame (Fx), by the base transceiver station;

[[•]] transmitting a pointer message (P) in the service channel of such frame (Fx), or of a subsequent frame (Fx+n), by the base transceiver station;

[[•]] detecting the marked synchronization signal (S') by the mobile unit;

[[•]] receiving the pointer message (P) by the mobile unit;

[[•]] extracting from the pointer message (P) the position of at least a system message (M') by the mobile unit.

2. (Currently Amended) ~~Method~~ The method according to claim 1, ~~characterized in that~~ wherein the marking of the synchronization signal (S) by the base transceiver station includes at least a polarity inversion of the relative modulation elementary units.

3. (Currently Amended) ~~Method~~ The method according to claim 2, ~~characterized in that~~ wherein the marking of the synchronization signal (S) by the base transceiver station includes two polarity inversions of the relative modulation elementary units in two consecutive frames (Fx, Fx+1).

4. (Currently Amended) ~~Method~~ The method according to any of claims 1 to 3, ~~characterized in that~~ wherein the extraction from the pointer message (P) of the position of at least a system message (M') includes the decoding of the frame number of such system message (M').

5. (Currently Amended) ~~Method~~ The method according to claim 4, ~~characterized in that~~ wherein the extraction from the pointer message (P) of the position of at least a system message (M') includes the decoding of the multiframe number of such system message (M').

6. (Currently Amended) ~~Method~~ The method according to any of claims 1 to 3, ~~characterized in that~~ wherein the marking of the synchronization signal (S) by the base transceiver station takes place with periodicity multiple of its own multiframe period.

7. (Currently Amended) ~~System~~ A system to synchronize at least one user equipment to at least one base transceiver station belonging to a digital telecommunication network, in which radio signals transmitted and received from said base station are divided into frames (Fn) having predefined duration and each frame is subdivided in a predefined number of timeslots (Tn) and codes (Cn), said signals including at least a synchronization signal (S) which is transmitted by the base transceiver station and includes a sequence of modulation elementary units suitable to identify the timeslot (T1) and the code (C1) of a service channel containing system messages (M), ~~characterized in that it includes~~ the system comprising:

at least a base transceiver station with means adapted:

[[•]] to mark the synchronization signal (S) in at least one frame (Fx), and

[[•]] to transmit a pointer message (P) in the service channel of this frame (Fx) or of a subsequent frame (Fx+n).

8. (Currently Amended) ~~System~~ The system according to claim 7, ~~characterized in that it~~ wherein the system includes at least a user equipment with means adapted:

to detect the marked synchronization signal (S') from said base transceiver station;

to receive the pointer message (P) transmitted by said base transceiver station, and

to extract from the pointer message (P) the position of at least a system message (M').

9. (Currently Amended) ~~System~~ The system according to claim 7 or 8, ~~characterized in that it~~ wherein the system includes an additional base transceiver station adapted to detect the

marked synchronization signal (S'), and synchronize in multiframe with said first base transceiver station through such marked synchronization signal (S').

10. (Currently Amended) ~~System~~ The system according to claim 7, ~~characterized in that~~
~~it~~ wherein the system is adapted to implement the method according to claim 1.